

Claims:

The following listing of claims will replace all prior versions and listings of claims in the application:

1. (previously presented) A method for operating a frequency converter for a generator of a wind turbine supplying electrical power to a public power grid, wherein the frequency converter comprises an AC/DC converter connected to the generator, a DC/AC converter connected to the grid, and a DC link circuit for connecting the AC/DC converter to the DC/AC converter, the method comprising the steps of:

sensing a grid voltage of the grid to detect a grid condition wherein the grid voltage decreases by at least a predetermined threshold and remains below the predetermined threshold for at least a predetermined time; and

reducing, upon detection of the grid condition, at least one of:

an output voltage of the DC link circuit for increasing an output current of the DC/AC converter, and

an operation frequency of electronic switches of the DC/AC converter for increasing the output current of the DC/AC converter.

2. (previously presented) The method of claim 1, wherein the predetermined threshold is about 10% of a nominal voltage of the grid, and wherein the reducing step is terminated when, for a few seconds, the grid voltage is increased to at least about 80% of the nominal voltage.

3. (previously presented) The method of claim 1, wherein the predetermined

threshold is about 20% of a nominal voltage of the public power grid, and wherein the reducing step is terminated when, for a few seconds, the grid voltage is increased to at least about 90% of the nominal voltage.

4. (previously presented) The method of claim 1, wherein the reducing step comprises reducing the output voltage of the DC link circuit by controlling a time interval between a zero-crossing of the output voltage of a phase of the generator and an operation of an electronic switch of the AC/DC converter.

5. (previously presented) The method of claim 1, wherein the reducing step comprises reducing the output voltage of the DC link circuit by reducing a pulse width interval of an electronic switch of the AC/DC converter.

6. (previously presented) The method of claim 1, wherein the reducing step is performed such that the output current of the DC/AC converter is increased without a substantial change of energy losses in the electronic switches of the DC/AC converter.

7. (previously presented) The method of claim 1, further in the reducing step, reducing simultaneously both the output voltage of the DC link circuit and the operation frequency of electronic switches of the DC/AC converter for increasing the output current of the DC/AC converter.

8. (previously presented) A method for operating a frequency converter for a

generator of a wind turbine supplying electrical power to a public power grid, in the event of a substantial grid voltage drop in the grid, wherein the frequency converter comprises an AC/DC converter connected to the generator, a DC/AC converter connected to the grid, and a DC link circuit for connecting the AC/DC converter to the DC/AC converter, the method comprising the step of:

reducing an operation frequency of electronic switches of the DC/AC converter for increasing the output current of the DC/AC converter.

9. (previously presented) The method of claim 8, wherein the reducing step is performed when, for a few seconds, the grid voltage is decreased by at least about 10% of a nominal voltage of the grid, and wherein the reducing step is terminated when, for a few seconds, the grid voltage is increased to at least about 80% of the nominal voltage.

10. (previously presented) The method of claim 8, wherein the reducing step is performed when, for a few seconds, the grid voltage is decreased by at least about 20% of a nominal voltage of the grid, and wherein the reducing step is terminated when, for a few seconds, the grid voltage is increased to at least about 90% of the nominal voltage.

11. (previously presented) The method of claim 8, wherein the reducing step is performed such that the output current of the DC/AC converter is increased without a substantial change of energy losses in the electronic switches of the DC/AC converter.